



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/042,955	01/08/2002	Brent Anderson	113937-002	4496
24573	7590	12/16/2003	EXAMINER	
BELL, BOYD & LLOYD, LLC PO BOX 1135 CHICAGO, IL 60690-1135			PIAZZA CORCORAN, GLADYS JOSEFINA	
		ART UNIT		PAPER NUMBER
				1733

DATE MAILED: 12/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/042,955	ANDERSON ET AL.
	Examiner	Art Unit
	Gladys J Piazza Corcoran	1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-60 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-60 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5, 6, 7</u> .	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed August 26, 2003 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language (references FR 724974, CH 247934, FR 1074166, DE 1761403, DE 2332927). It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 4, 14 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 4 is unclear by reciting that the second polymeric material is a multiple layer structure while being dependent upon claim 3 which recites that the second polymeric material is a monolayer structure. It is suggested to amend the dependency of claim 4 to claim 2.

5. Claims 14 and 15 are unclear by reciting that the polymeric material is a second polyolefin, however there is never a first polyolefin.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-6, 9, 10, 16, 17, 26-29, are rejected under 35 U.S.C. 102(b) as being anticipated by Richter (US Patent No. 4,893,731).

Richter discloses a method for treating a surface of a layered polymeric structure by providing a first sheet of material (layer 89), providing a second sheet of material (reinforcing strip material 106), positioning the first sheet or the second sheet to overlap at least a portion of the other sheet to define an interference zone, directing a first polymeric material (layer 88) into the interference zone to adhere the first sheet to the second sheet to form the layered structure and texturing a surface of the first sheet or the second sheet to form a pattern on the surface (column 3, lines 51-68).

As to claim 27, the first sheet is a first polymeric material is a polyolefin, ethylene and vinyl alcohol copolymer, and texturing the first sheet to form a pattern on a surface of the first sheet (see figures- both surfaces are textured with grooves). As to claims 2, the first sheet (layer 89) is a second polymeric material. As to claim 3, the second polymeric material is a monolayer structure. As to claim 4, the second polymeric material is a multiple layer structure (Richter discloses providing multiple layers for the bag layers (column 4, lines 13-14 and 34-35). As to claim 5, the second polymeric material is a polyolefin, ethylene and vinyl alcohol copolymer. As to claim 6, the

Art Unit: 1733

polyolefin is a copolymer. As to claims 9 and 28, the second sheet is a third polymeric material (reinforcing strip 106). As to claims 10 and 29, wherein the third polymeric material is a polyolefin. As to claim 16, the step of texturing is carried out essentially immediately after the step of adhering the first sheet to the second sheet. As to claim 17, the step of texturing comprises the step of contacting the first or second sheet with a surface having a pattern (forming plates 114). As to claim 26, the pattern comprises a plurality of spaced objects (grooves).

8. Claims 1-3, 5-7, 9-11, 13, 14, 16-20, 22, 23, 26-36, 38, 39, 41, 43, 48, 49, 56-58 are rejected under 35 U.S.C. 102(b) as being anticipated by Aizawa et al. (US Patent No. 5,928,762).

Aizawa discloses a method for treating a surface of a layered polymeric structure by providing a first sheet of material (embossed sheet 12), providing a second sheet of material (base sheet B), positioning the first sheet or the second sheet to overlap at least a portion of the other sheet to define an interference zone, directing a first (second for claim 27) polymeric material (adhesive resin layer 13) into the interference zone to adhere the first sheet to the second sheet to form the layered structure and texturing a surface of the first sheet or the second sheet to form a pattern on the surface (column 7, lines 15-35).

As to claim 27, the first sheet (embossed sheet 12) is a first polymeric material of the same materials as claimed (column 2, lines 54-65), and texturing the first sheet to form a pattern on a surface of the first sheet. As to claim 2, the first sheet is a second polymeric material (column 2, lines 54-65). As to claims 3, 48, 49, the second polymeric

material is a monolayer structure. As to claim 5, the second polymeric material is of the claimed materials (column 2, lines 54-65) (it is further noted that the first sheet can be considered to be the base sheet material in which case all the claimed materials are disclosed column 5, line 42 to column 6, line 5). As to claim 6, the polyolefins are selected from homopolymers and copolymers. As to claim 7, wherein the copolymers are selected from copolymers of ethylene and α -olefins having from 3 to 20 carbons (column 2, lines 54-65). As to claims 9 and 28, the second sheet is selected from the group consisting of a third polymeric material, paper, and metal (column 5, lines 30-39). As to claims 10 and 29, the third polymeric material is of the same materials as claimed (column 5, line 42 to column 6, line 5). As to claim 11, wherein the third polymeric material is a polyamide (column 5, line 42 to column 6, line 5). As to claims 13 and 31, wherein the step of directing a first polymeric material comprises the step of extruding a molten polymeric material (column 7, lines 15-35). As to claim 14 wherein the molten polymeric material is a second polyolefin (column 12, lines 25-30). As to claims 16 and 30, the step of texturing is carried out substantially simultaneously with the step of joining the first sheet to the second sheet (column 2, lines 20-28). As to claims 17 and 33, the step of texturing comprises the step of contacting the first or second sheet with a surface having a pattern (embossing roll 15). As to claims 18 and 34 wherein the surface is provided on a roll (embossing roll 15). As to claims 19 and 35, the roll is a chill roll (embossing/cooling roll 15). As to claims 20 and 36, the roll is a backup roll (embossing roll 15)- the embossing roll can be considered as a back up roll. As to claims 22, 23, 38 and 39, the pattern is considered to extends outward (protrusions) and

Art Unit: 1733

inward (valleys) from the surface of the roll. As to claims 26, 41, 43, the pattern comprises a plurality of spaced objects/protuberances with a polygonal shape (see figures). As to claim 32, the second polymeric material is an adhesive material. As to claim 56, the second sheet is a monolayer structure (column 5, line 42 to column 6, line 5). As to claim 57, the second sheet contains a layer of a polyamide or a layer of a polyester (column 5, line 42 to column 6, line 5). As to claim 58 the second polymeric material (adhesive resin layer 13) is a polyolefin (column 12, lines 25-30).

9. Claims 1-6, 9-23, 26-44, 48-52, 56-60, are rejected under 35 U.S.C. 102(b) as being anticipated by DellaVecchia et al. (US Patent No. 4,269,884).

DellaVecchia discloses a method for treating a surface of a layered polymeric structure by providing a first sheet of material (13), providing a second sheet of material (15), positioning the first sheet or the second sheet to overlap at least a portion of the other sheet to define an interference zone, directing a first polymeric material (20) into the interference zone to adhere the first sheet to the second sheet to form the layered structure and texturing a surface of the first sheet or the second sheet to form a pattern on the surface (column 4, lines 14-29).

As to claim 27, the first sheet is a first polymeric material is a material of the ones claimed (column 5, lines 15-54), and texturing the first sheet to form a pattern on a surface of the first sheet (see figures- both surfaces are textured). As to claim 2, the first sheet (13) is a second polymeric material (column 5, lines 15-54). As to claim 3, the second polymeric material is a monolayer structure (layer 13). As to claim 4, the second polymeric material is a multiple layer structure (layer 13 with layer 23). As to

claim 5, the second polymeric material is of the materials claimed (column 5, lines 15-54). As to claim 6, the polyolefins are selected from homopolymers and copolymers (column 5, lines 15-54). As to claims 9 and 28, the second sheet is a third polymeric material. As to claims 10 and 29, wherein the third polymeric material is of the materials as claimed (column 5, lines 15-54). As to claim 11, wherein the third polymeric material is a polyamide (column 5, lines 15-54). As to claim 12, wherein the polyamide is selected from nylon 6,6, nylon 6, and nylon 6,12 (column 5, lines 15-54). As to claims 13 and 31, wherein the step of directing a first polymeric material comprises the step of extruding a molten polymeric material (20). As to claim 14 wherein the molten polymeric material is a second polyolefin (column 5, lines 15-54). As to claim 15, where the second polyolefin is a homopolymer of ethylene (column 5, lines 15-54). As to claims 16 and 30, the step of texturing is carried out prior to or substantially simultaneously with the step of joining the first sheet to the second sheet. As to claims 17 and 33, the step of texturing comprises the step of contacting the first or second sheet with a surface having a pattern. As to claims 18 and 34 wherein the surface is provided on a roll. As to claims 19 and 35, the roll is a chill roll. As to claims 20 and 36, the roll is a backup roll. As to claims 21 and 37, the pattern is carried on two rolls. As to claims 22 and 38, the pattern extends outward from the surface of the roll. As to claims 23 and 39, the pattern extends inward from the surface of the roll. As to claim 26, the pattern comprises a plurality of spaced objects. As to claim 32, the material 20 is considered to be an adhesive material. As to claim 40, the pattern is generally a checkerboard pattern (regularly spaced cubes; column 4, lines 14-28). As to claim 41,

Art Unit: 1733

the pattern is defined by a series of spaced protuberances (column 4, lines 14-28). As to claim 42, the protuberances have a generally circular shape (column 4, lines 14-28). As to claim 43, the protuberances have a polygonal shape (column 4, lines 14-28). As to claim 44, the protuberances have an irregular shape (column 4, lines 14-28). As to claim 48, the first sheet is a monolayer structure or a multiple layered structure. As to claim 49, the first sheet is a monolayer structure. As to claim 50, the first sheet is a multiple layered structure. As to claim 51, the multiple layered structure has a first layer and a second layer. As to claim 52, the first layer is a polyolefin. As to claim 56, the second sheet is a monolayer structure or a multiple layered structure. As to claim 57, the second sheet contains a layer of a polyamide or a layer of a polyester. As to claim 58, the second polymeric material is a polyolefin. As to claim 59, the second polymeric material is a homopolymer of ethylene. As to claim 60, the second polymeric material is a homopolymer of polyethylene.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aizawa (US Patent No. 5,928,762) or DellaVecchia et al. (US Patent No. 4,269,884) as applied to claim 18 above, and further in view of conventional practice.

The references Aizawa or DellaVecchia do not specifically disclose the particular materials the embossing rolls are formed of, however it is well known and considered conventional in the art to form embossing rolls of metal, rubber, cork or plastic. It would have been obvious to one of ordinary skill in the art at the time of the invention to form the materials as shown by Aizawa or DellaVecchia with embossing rolls formed of conventional materials as is well known in the art and well within the purview of one of ordinary skill in the art.

13. Claims 30, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter (US Patent No. 4,893,731) in view of Aizawa (US Patent No. 5,928,762).

Richter discloses a method of embossing packaging material where the embossing step may be carried out in any known manner (column 4). It is known in the art to provide embossing to packaging materials by simultaneously embossing the material and laminating the material in order to reduce excess steps and conserve heating. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method of forming the packaging material as shown by Richter

by simultaneously carrying out the embossing and laminating steps as is known in the art and exemplified by Aizawa in order to reduce steps and conserve heating. As to claim 33, the sheet is contacted with a surface with a pattern in both references.

14. Claims 40-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter in view of Aizawa as applied to claim 33 above, and further in view of Niedospial, Jr. (US Patent No. 5,728,086) and/or Taunton (US Patent No. 2,778,173).

It is well known in the art to provide a variety of patterns for embossing packaging material. For example, Niedospial and/or Taunton both show examples of patterns for embossing packaging materials in order to allow the contents of the package to flow more easily out of the package. It would have been obvious to one of ordinary skill in the art at the time of the invention to form the package material as shown by Richter and Aizawa by using well known patterns in the art as exemplified by Niedospial and/or Taunton in order to allow the contents of the package to flow more easily out of the package.

15. Claims 8, 50-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter optionally in view of Aizawa as applied to claims 4 and 30 above, and further in view of Scholle (US Patent No. 4,041,209), Cancio et al. (US Patent No. 4,284,671), as further taken with Aizawa (US Patent No. 5,928,762).

Richter discloses the layers of the package material may be formed of multiple layers and of any materials known in the art. It is well known in the art to form package layers of ethylene and α-olefin copolymer laminated to a barrier material of ethylene and vinyl alcohol copolymer. Scholle and Cancio both disclose forming a packaging layer

Art Unit: 1733

material with multiple layers by providing a polyolefin layer (particularly a polyethylene layer) with a barrier material of EVA. The references disclose using any known polyolefin layers. Aizawa discloses it is known in the packaging art to use layers of ethylene and α-olefin copolymer. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the package layers in Richter with well known packaging materials such as the materials disclosed as is well known in the art and further exemplified by the references Scholle, Cancio, and Aizawa. Only the expected results would be attained by selecting such well known materials in the packaging industry.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gladys J Piazza Corcoran whose telephone number is (703) 305-1271 until December 18, 2003 and (571) 272-1214 afterwards. The examiner can normally be reached on M-F 8am-5:30pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (703) 308-3853. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Gladys J. Piazza Corcoran
Examiner
Art Unit 1733

GJPC